

CLAIM AMENDMENTS

1 1. (original) A cutting insert normally clamped to a
2 disk- or bar-shaped tool body (30, 36), in particular for milling
3 crankshafts and having a front face (10, 22) along at least one
4 edge of which, and preferably along opposite edges of which, there
5 is a respective convex edge face (11) having an arcuate edge (12)
6 extending over an angle between 90° and 180° and serving as cutting
7 edge,

8 characterized in that
9 either a straight cutting edge (14) generally perpendicular to the
10 front face or at a maximum angle of 4° to a perpendicular to the
11 front face or a concave edge (24) merges with the arcuate cutting
12 edge(s) (12).

1 2. (original) The cutting insert according to claim 1,
2 characterized in that a mounting hole for receiving a mounting
3 screw extends through the front face (10, 22) so that the cutting
4 insert (31) can be mounted laterally on the tool support (30).

1 3. (original) The cutting insert according to claim 1,
2 characterized in that a mounting hole for receiving a mounting
3 screw extends through a roof surface (35) so that the cutting
4 insert (34) can be mounted via a mounting screw extending radially
5 of the tool support (36).

1 4. (currently amended) The cutting insert according to
2 ~~one of claims~~ claim 1 [[to 3]], characterized in that the arcuate
3 cutting edge (12) has an edge bevel (17, 26) that extends at a
4 bevel angle of 0° to 20°, preferably 10°, and/or that tapers at the
5 front face to a width of 0 mm.

1 5. (currently amended) The cutting insert according to
2 ~~one of claims~~ claim 1 [[to 4]], characterized in that the radius of
3 curvature of the arcuate cutting edge (12), is 1.0 mm to 2.5 mm,
4 preferably 1.4 mm.

1 6. (currently amended) The cutting insert according to
2 ~~one of claims~~ claim 1 [[to 5]], characterized in that the radius of
3 curvature of the concave edge (24) is smaller than the radius of
4 curvature of the arcuate cutting edge (12), preferably 0.3 mm to
5 1 mm, in particular 0.6 mm.

1 7. (currently amended) The cutting insert according to
2 ~~one of claims~~ claim 1 [[to 6]], characterized in that extending
3 from the concave edge (24) there is a straight cutting edge (25)
4 for machining cylindrical surfaces, in particular journals of
5 crankshafts.

1 8. (currently amended) The cutting insert according to
2 ~~one of claims~~ claim 1 [[to 7]], characterized in that flanks (18,
3 28) adjacent the arcuate cutting edge (12) and/or the straight
4 cutting edge (25) are set at a positive cutting angle between 0°
5 and 20°, preferably at a positive cutting angle of 10°.

1 9. (currently amended) The cutting insert according to
2 ~~one of claims~~ claim 7 [[or 8]], characterized in that centrally
3 extending perpendicular to the front face (22) there are planar
4 side faces (23) that taper away from the front face (22),
5 preferably with flanks (29) extending away from these side faces
6 acting as chip-conducting steps for chips produced by the straight
7 cutting edge (25).

1 10. (currently amended) A milling tool with a plurality
2 of laterally clamped cutting inserts (31, 32) according to ~~one of~~
3 ~~claims~~ claim 1 [[to 9]], where a cutting insert (32) with an
4 arcuate edge (12) and a straight adjacent edge (14) alternates with
5 a cutting insert (31) with an arcuate edge (12) and a concave
6 adjacent edge (24) and a further straight edge (25).

1 11. (new) In combination with a support movable in a
2 predetermined direction, a cutting insert having a body secured to
3 the support and formed with:

4 a front face lying generally in a plane generally
5 parallel to the direction;

6 an arcuate edge face having an outer end merging with the
7 front face, an outer end, and defining between the inner and outer
8 ends an arcuate cutting edge;

9 a side face directed forward in the direction and
10 defining an outer cutting extending transversely of the front face
11 from the outer end of the arcuate edge.

1 12. (new) The combination defined in claim 11 wherein
2 the outer edge is generally straight and generally perpendicular to
3 the front face.

1 13. (new) The combination defined in claim 12 wherein
2 the outer edge extends at an angle of at most 4° to the front face.

1 14. (new) The combination defined in claim 11 wherein
2 the outer edge has a concave portion merging with at the outer end
3 with arcuate edge face and a straight outer portion extending
4 inward away from the concave portion.

1 15. (new) The combination defined in claim 14 wherein
2 the concave portion has a smaller radius of curvature than the
3 arcuate cutting edge.

1 16. (new) The combination defined in claim 15 wherein
2 the arcuate cutting edge has a radius of curvature between 1.0 mm
3 and 2.5 mm and the concave portion has a radius of curvature
4 between 0.3 mm and 1 mm.

1 17. (new) The combination defined in claim 11 wherein
2 the arcuate cutting edge has an edge bevel extending at an angle of
3 0° to 20°.

1 18. (new) The combination defined in claim 11 wherein
2 the arcuate cutting edge has a radius of curvature of between
3 1.0 mm and 2.5 mm.

1 19. (new) The combination defined in claim 11 wherein
2 the side face extends at a positive cutting angle between 0° and
3 20°.